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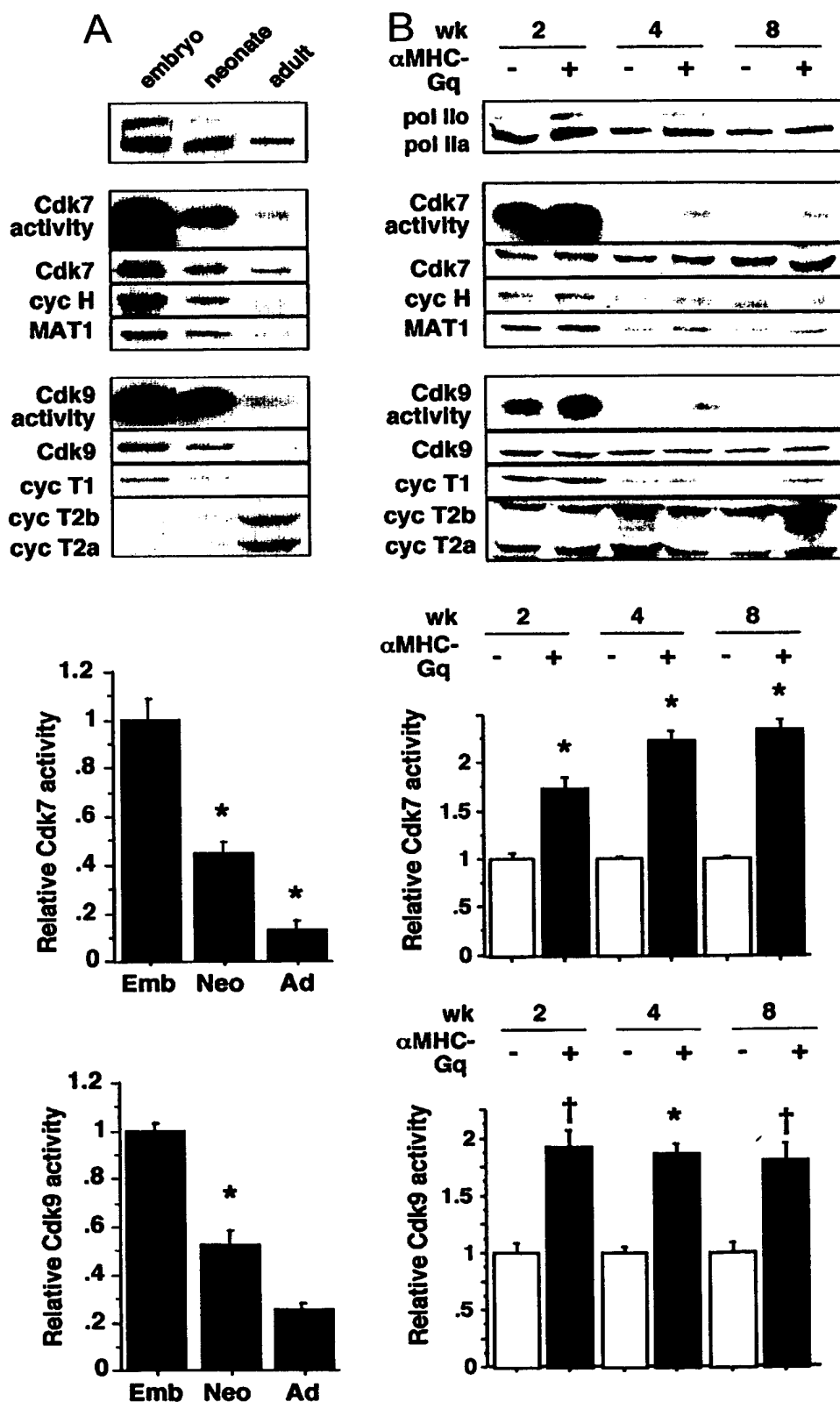


FIG. 1



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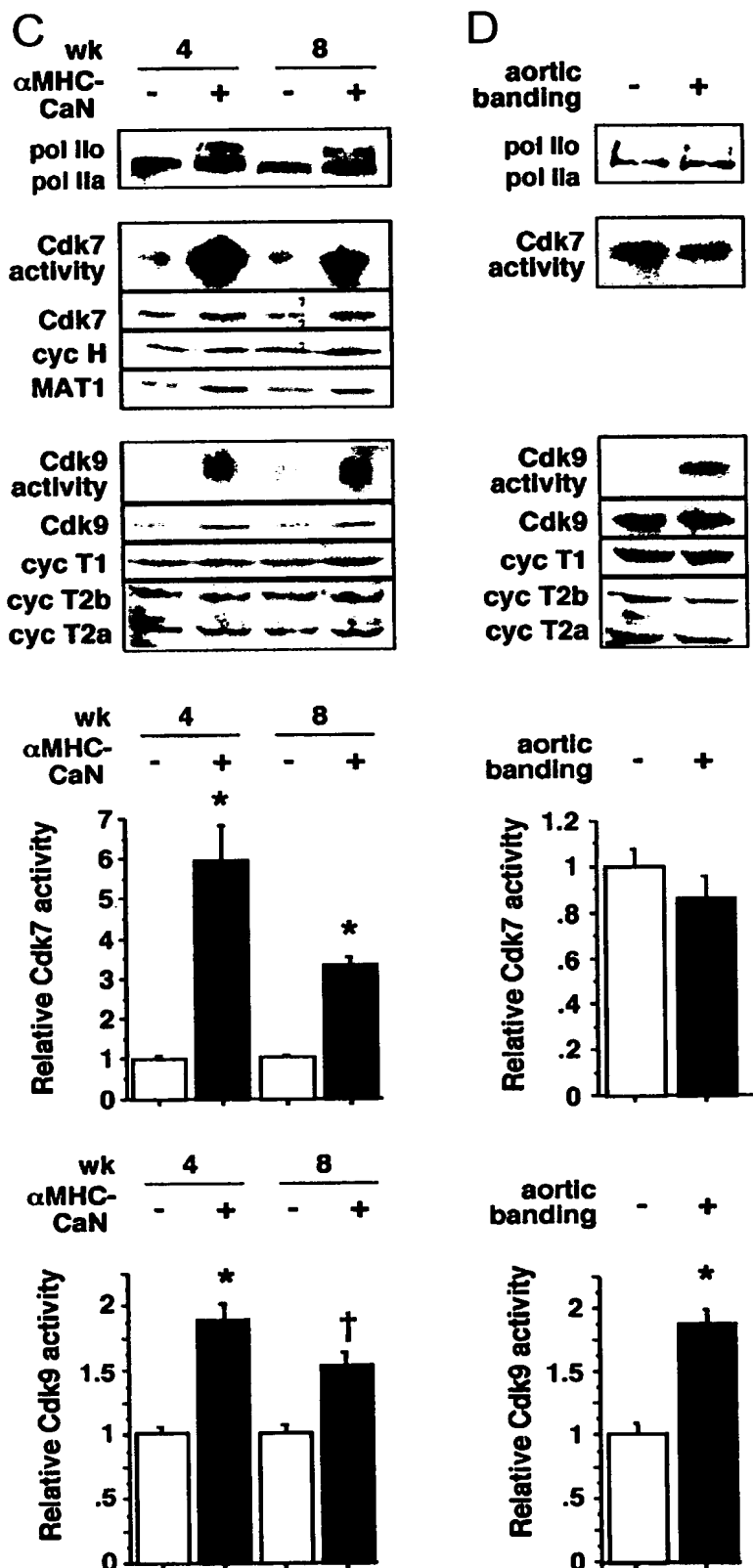
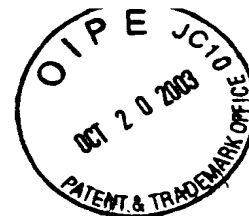


FIG. 1



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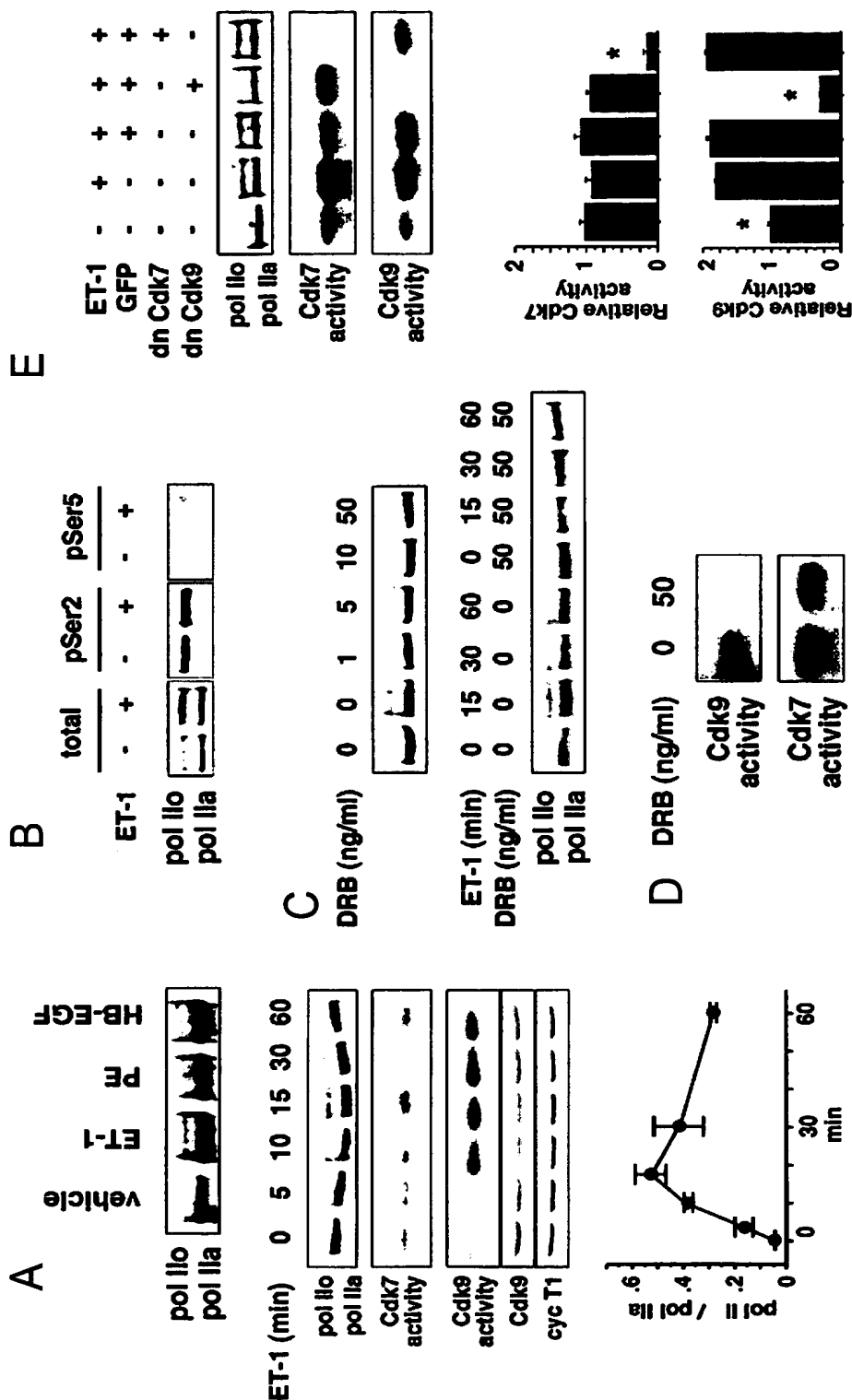
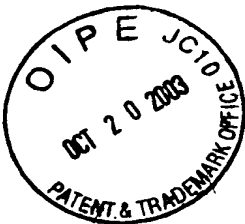


FIG. 2



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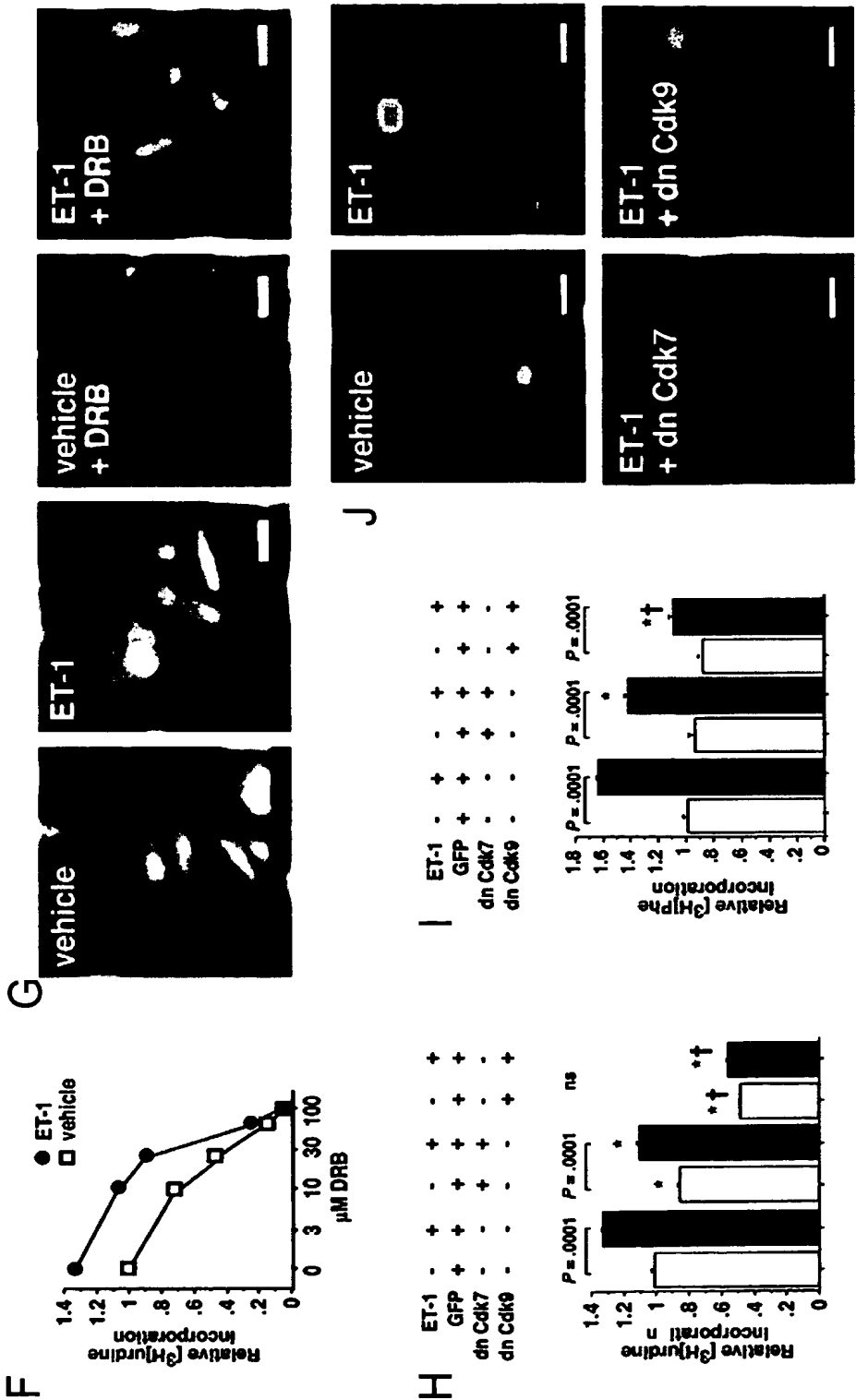
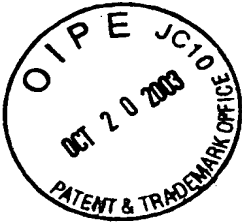


FIG. 2



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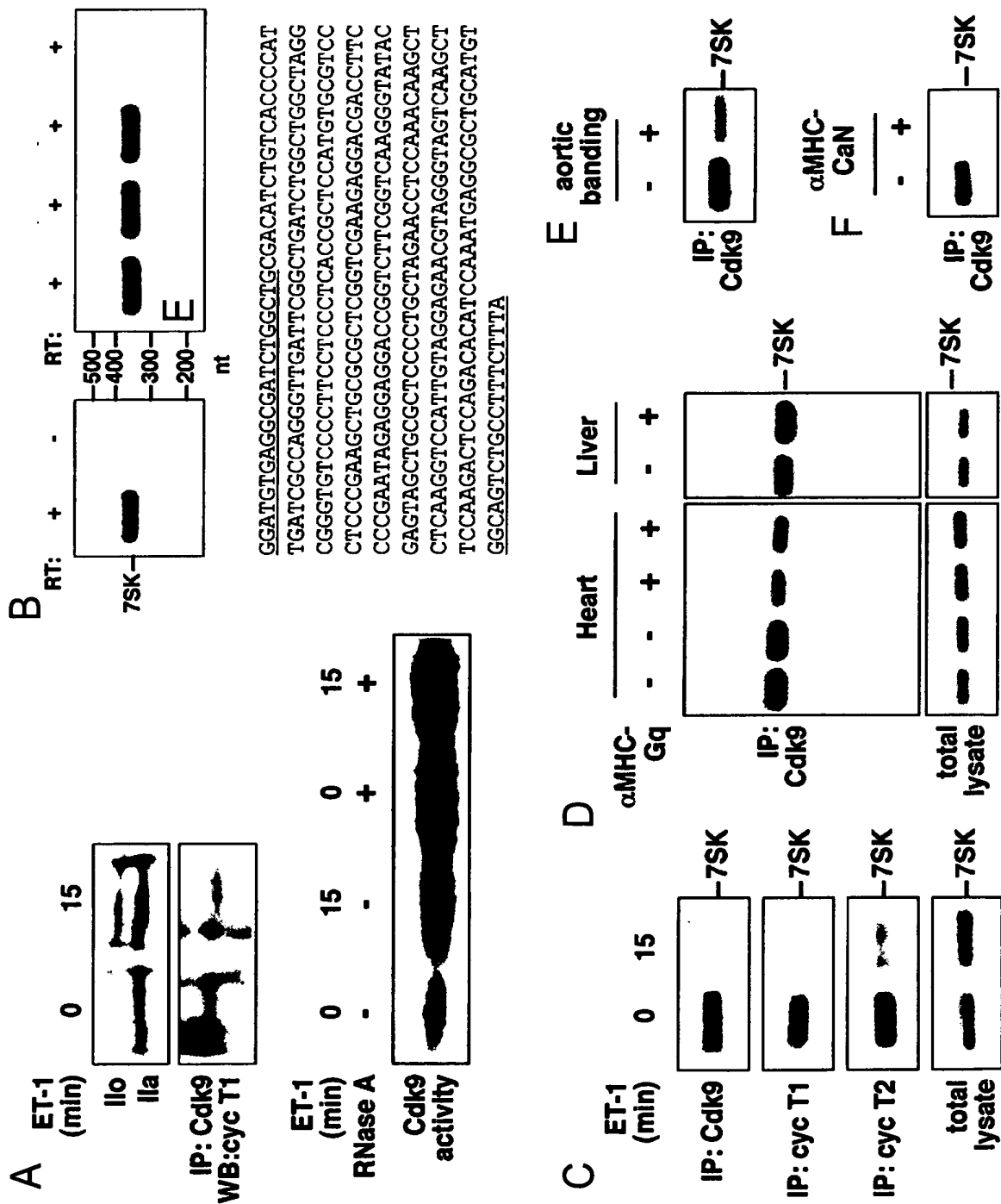
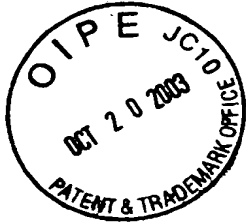


FIG. 3



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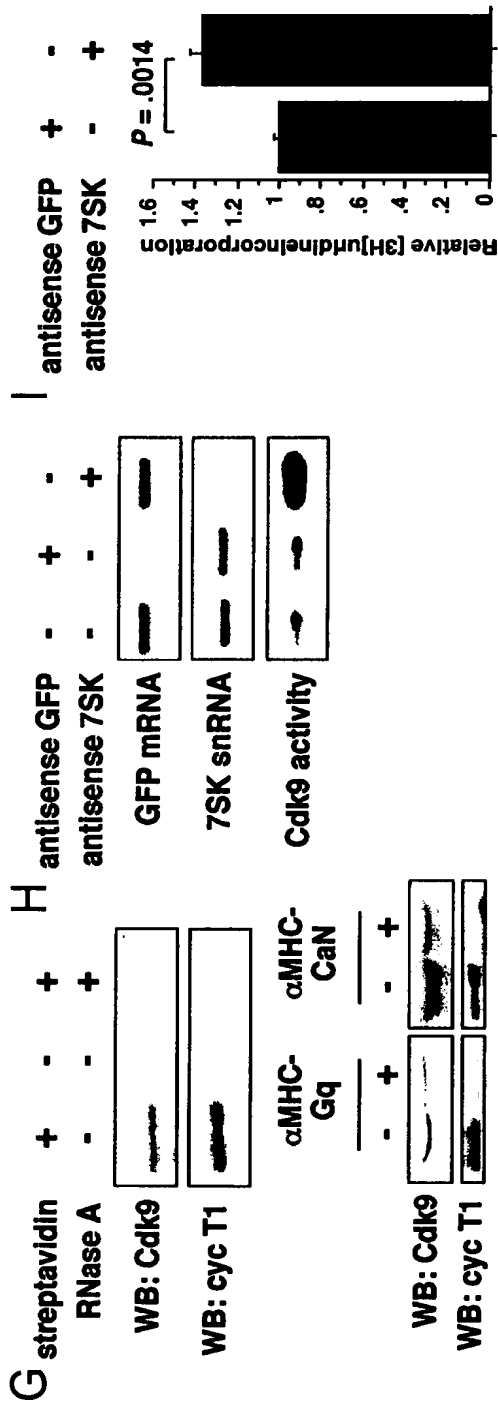
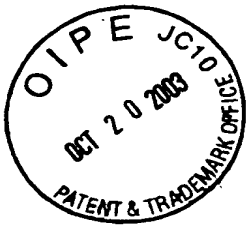


FIG. 3



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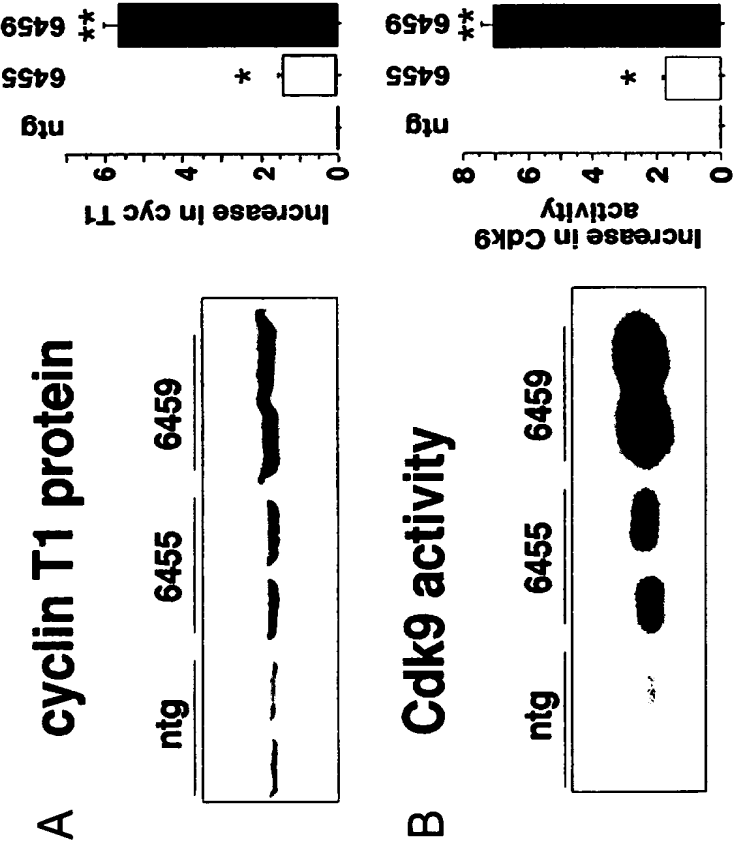


FIG. 4

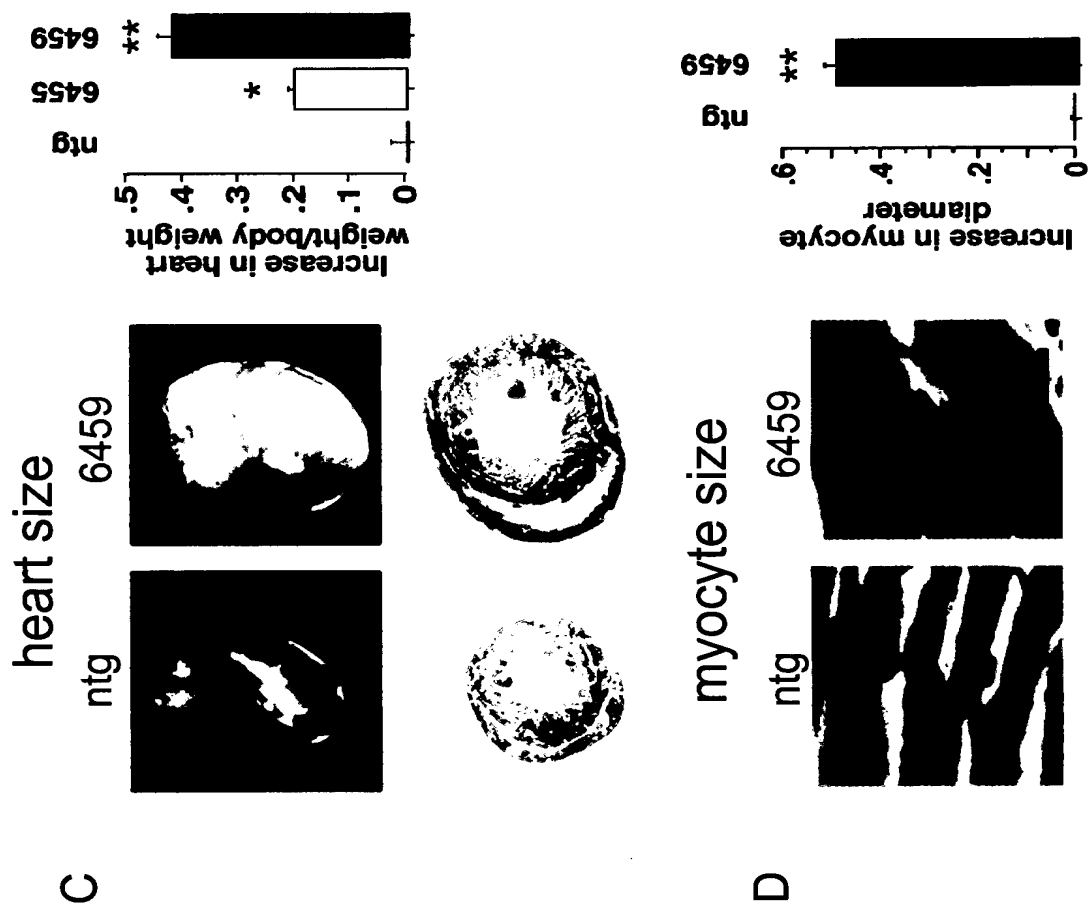
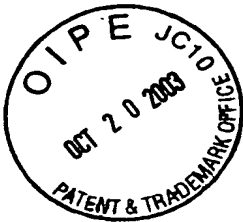
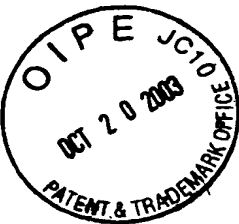


FIG. 4



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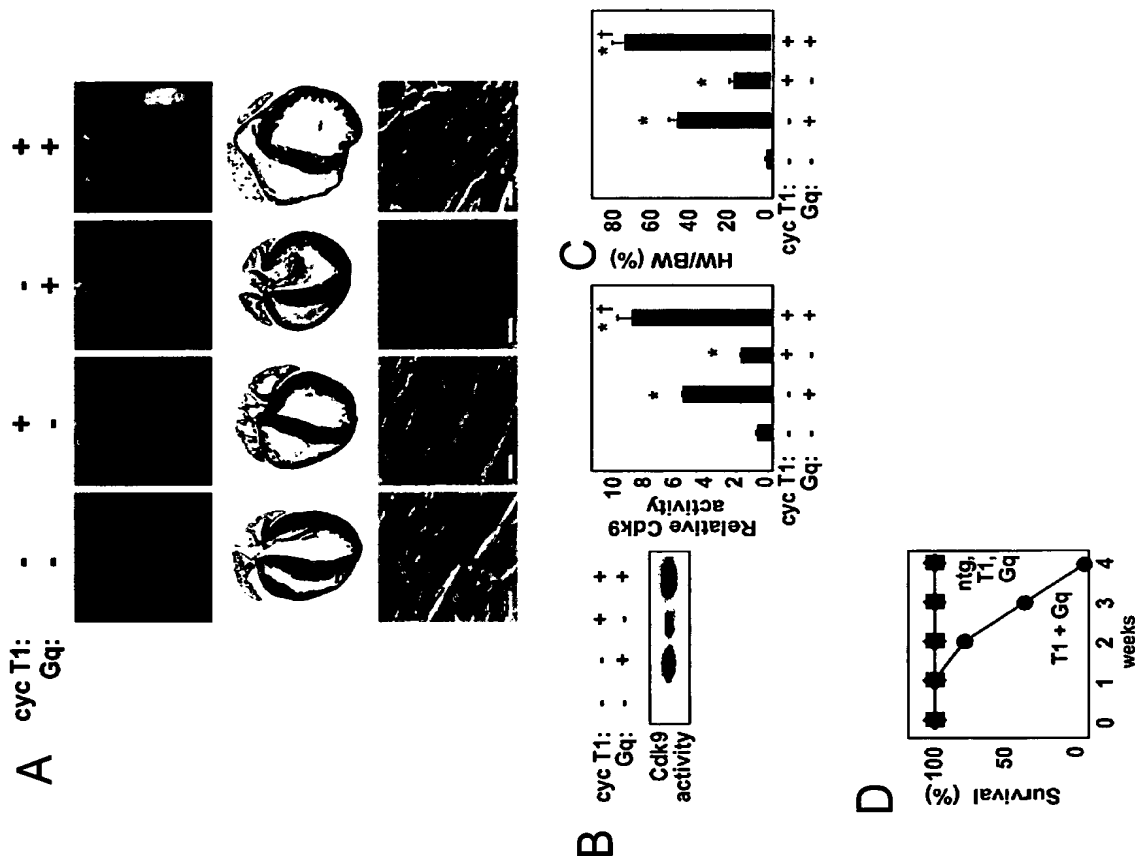
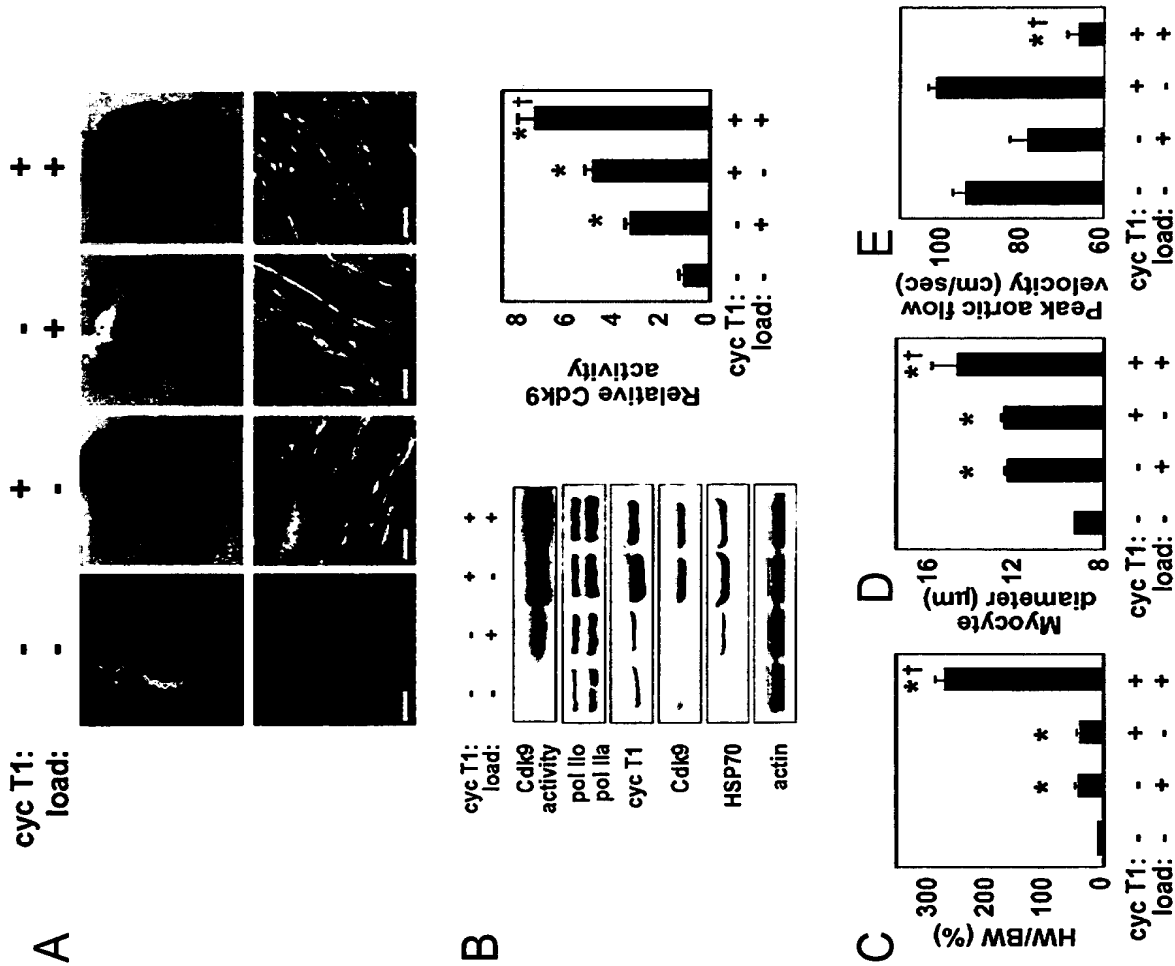
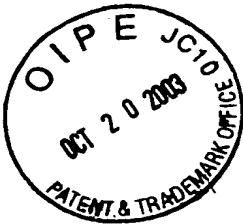
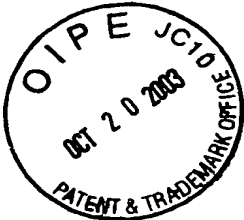
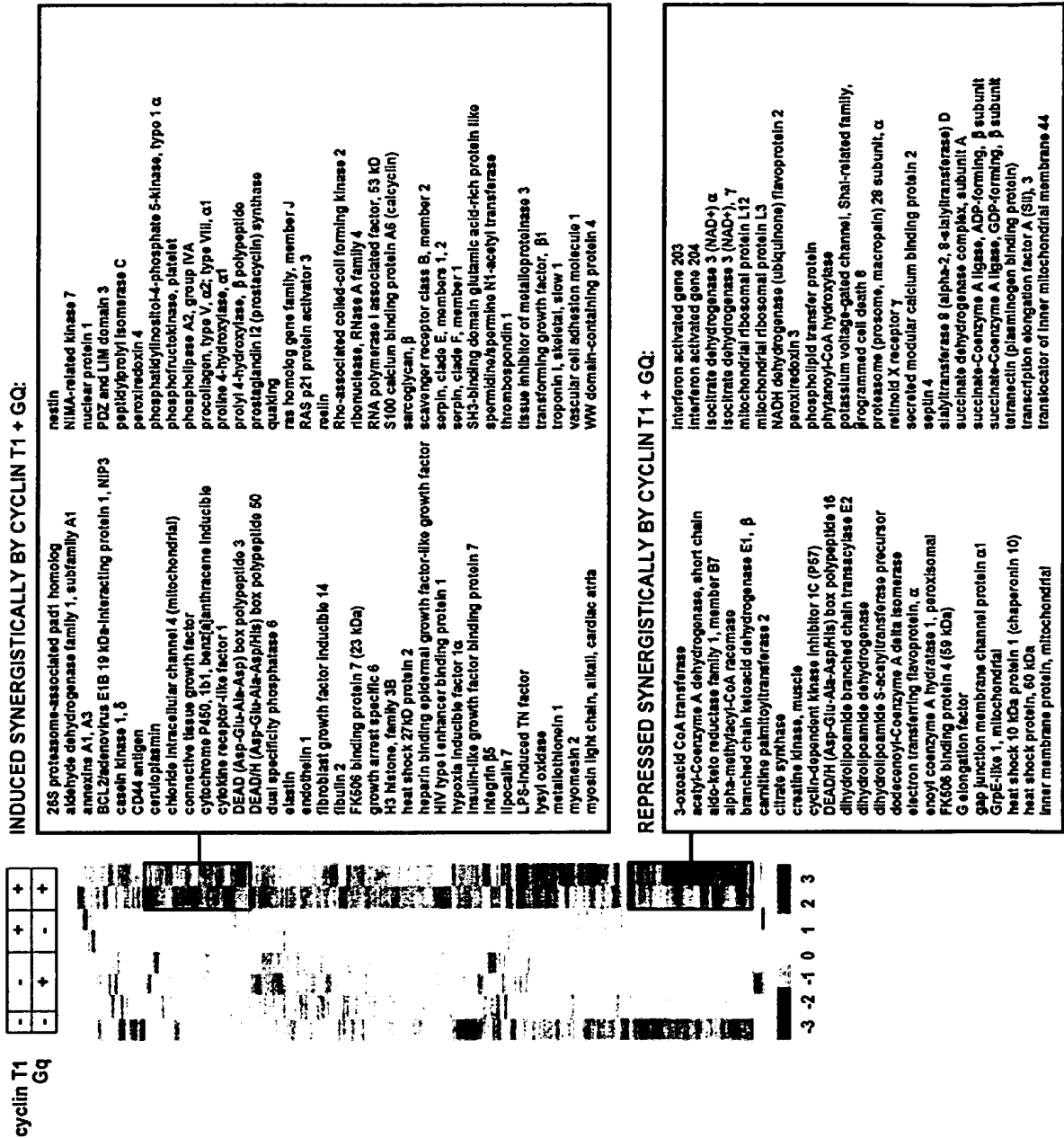


FIG. 5





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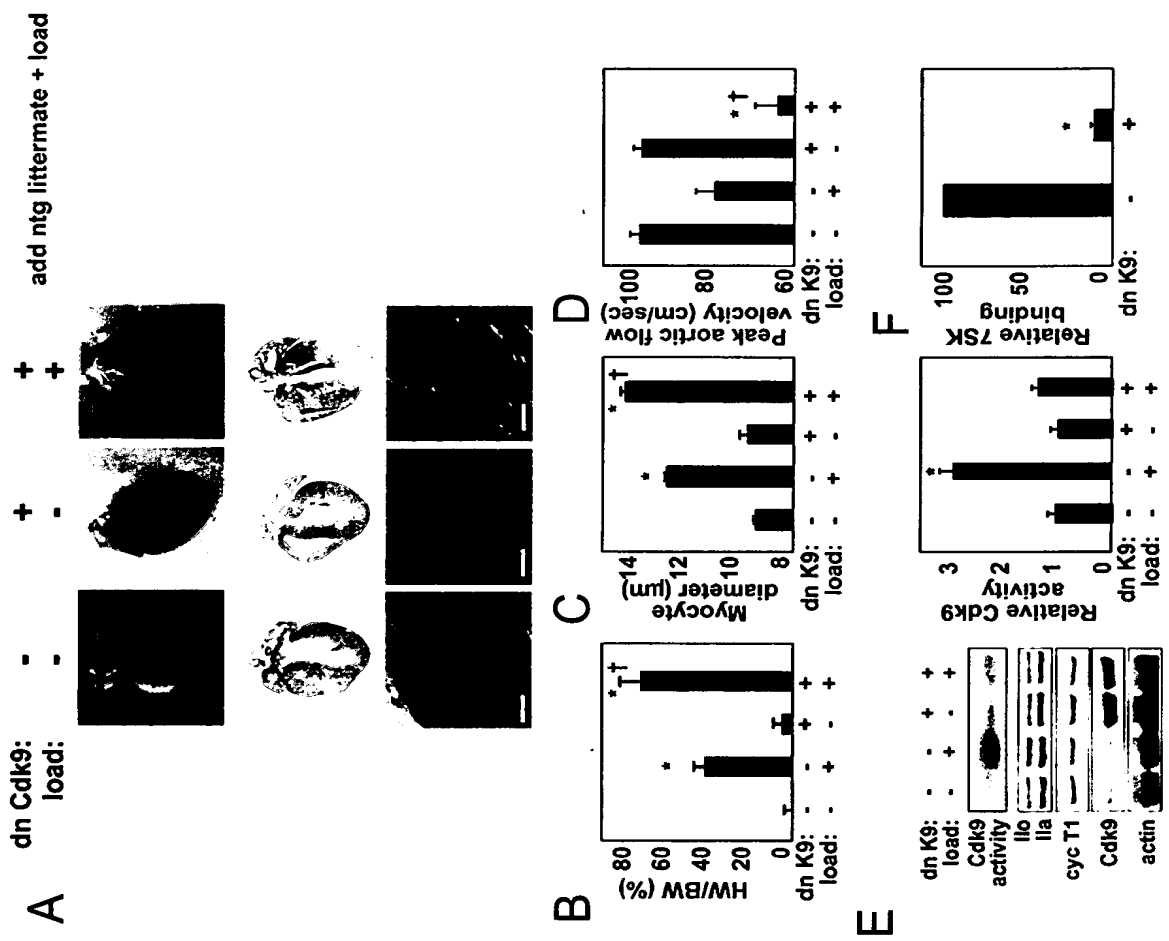


FIG. 8

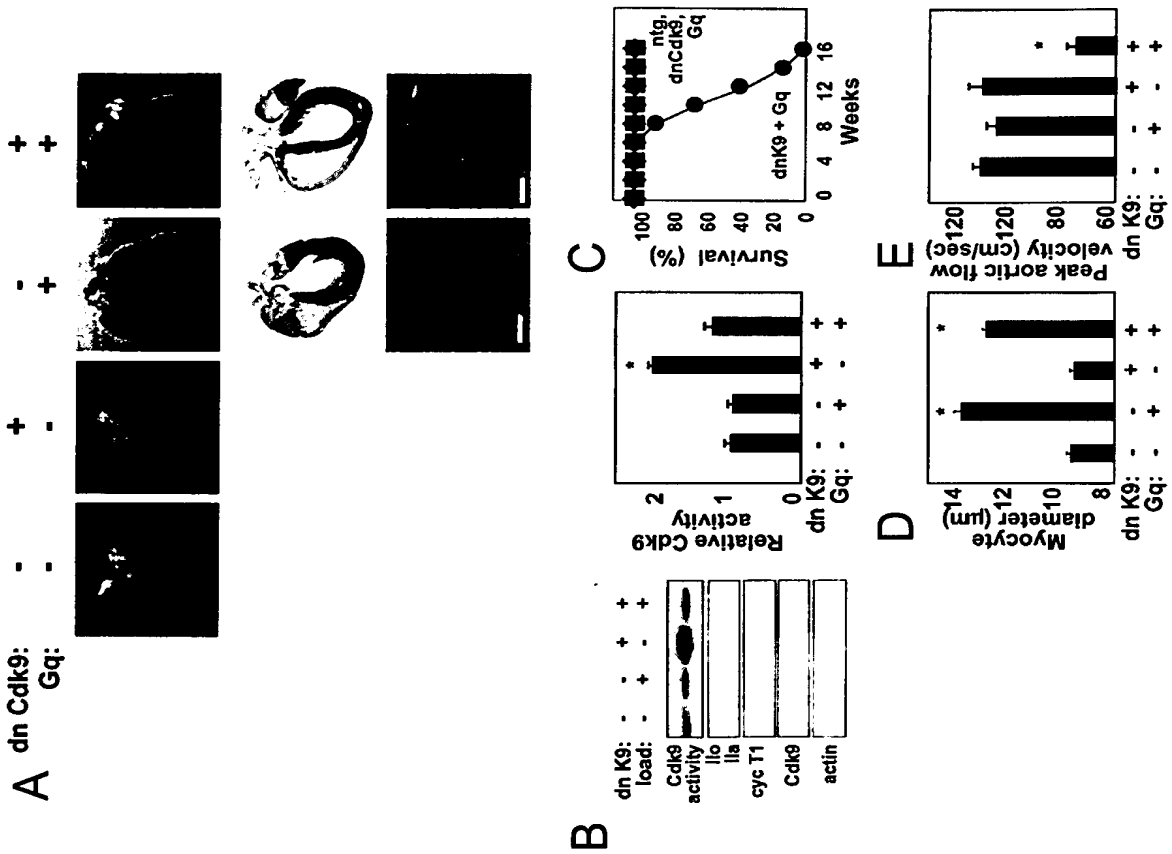
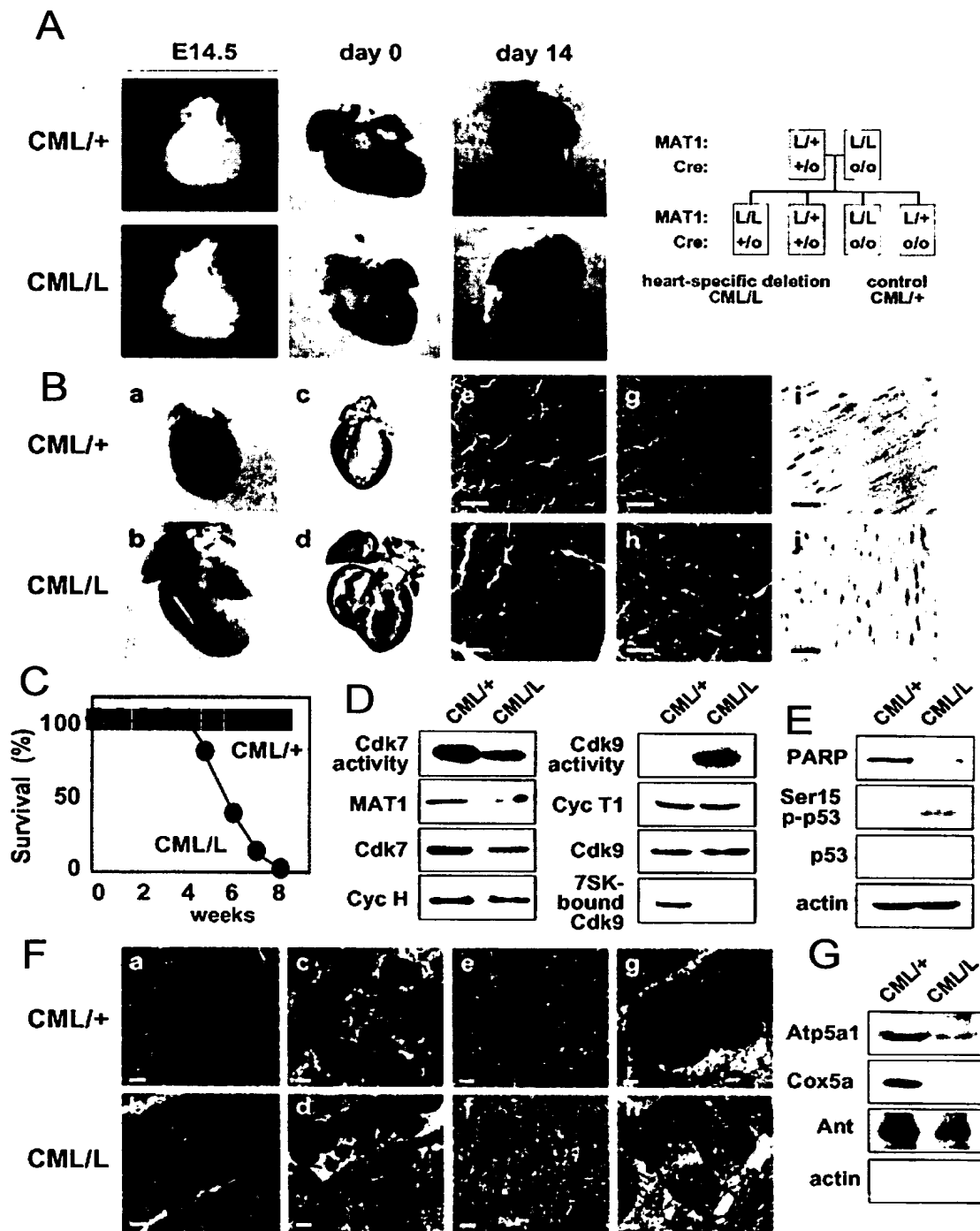
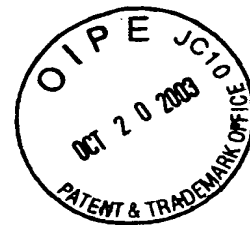


FIG. 9

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REPPRESSED AT 4 WK BY CARDIOMYOCYTE-SPECIFIC DELETION OF MAT1:

3-oxoacid CoA transferase
acetyl-Coenzyme A dehydrogenase, short chain
BCL2/adenovirus E1B 19 kDa-interacting protein 1, NIP3
bone morphogenetic protein 7
branched chain ketoacid dehydrogenase E1, beta
cadherin 13
calcium channel, voltage-dependent, T type, alpha 1G
carnitine deficiency-associated gene expressed in ventricle 1
catechol-O-methyltransferase
citrate synthase
cub-like 1 (Drosophila)
cytochrome c oxidase, subunit VIIa 1
DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 16
deleted in polyposis 1
dihydrolipoamide branched chain transacylase E2
dihydrolipoamide dehydrogenase
dodecenoyl-Coenzyme A delta isomerase
electron transferring flavoprotein, alpha
enoyl coenzyme A hydratase 1, peroxisomal
enoyl Coenzyme A hydratase, short chain, 1, mitochondrial
fibroblast activation protein
FK506 binding protein 4 (50 kDa)
four and a half LIM domains 2
fumate hydratase 1
GAP elongation factor
gap junction membrane channel protein alpha 1
heat shock 10 kDa protein 1 (chaperonin 10)
heat shock protein, 60 kDa
histidine rich calcium binding protein
interferon activated gene 203
Iroquois related homeobox 3 (Drosophila)
isocitrate dehydrogenase 3 (NAD+) alpha
isocitrate dehydrogenase 3 (NAD+), gamma
isovaleryl coenzyme A dehydrogenase
kit ligand

Iipin 1
Irfocellin 7
kai1 response element binding transcription factor 2
kai1/theta1/theta2
methylmalonyl-Coenzyme A mutase
mitochondrial ribosomal protein L12
mitochondrial ribosomal protein L34
myeloid leukemia factor 1
myomesin 2
NADH dehydrogenase (ubiquinone) flavoprotein 2
p300/CBP-associated factor
peroxiredoxin 3
phosphofructokinase, liver, B-type
phospholipid transfer protein
phytanoyl-CoA hydroxylase
plasma membrane associated protein, 83-12
potassium voltage-gated channel, Shal-related family, 2
programmed cell death 8
prohibitin
prostaglandin D2 synthase (21 kDa, brain)
proteasome (prosome, macropain) 28 subunit, alpha
RAN guanine nucleotide release factor
retinoid X receptor gamma
sequestosome 1
sialyltransferase 8 (alpha-2, 8-sialyltransferase) D
thioester/enoyl-Coenzyme A hydratase, beta subunit
titin 3 (silent mating type information regulation 2, homolog) 3
succinate dehydrogenase complex, subunit A
succinate-Coenzyme A ligase, GDP-forming, beta subunit
thyroid hormone responsive SPOT14 homolog (Raltus)
transcription elongation factor A (50), 3
transforming growth factor, beta induced, 68 kDa
translocator of inner mitochondrial membrane 44
ubiquinol-cytochrome c reductase core protein 1
vascular endothelial growth factor B

INDUCED AT 4 WK BY CARDIOMYOCYTE-SPECIFIC DELETION OF MAT1:

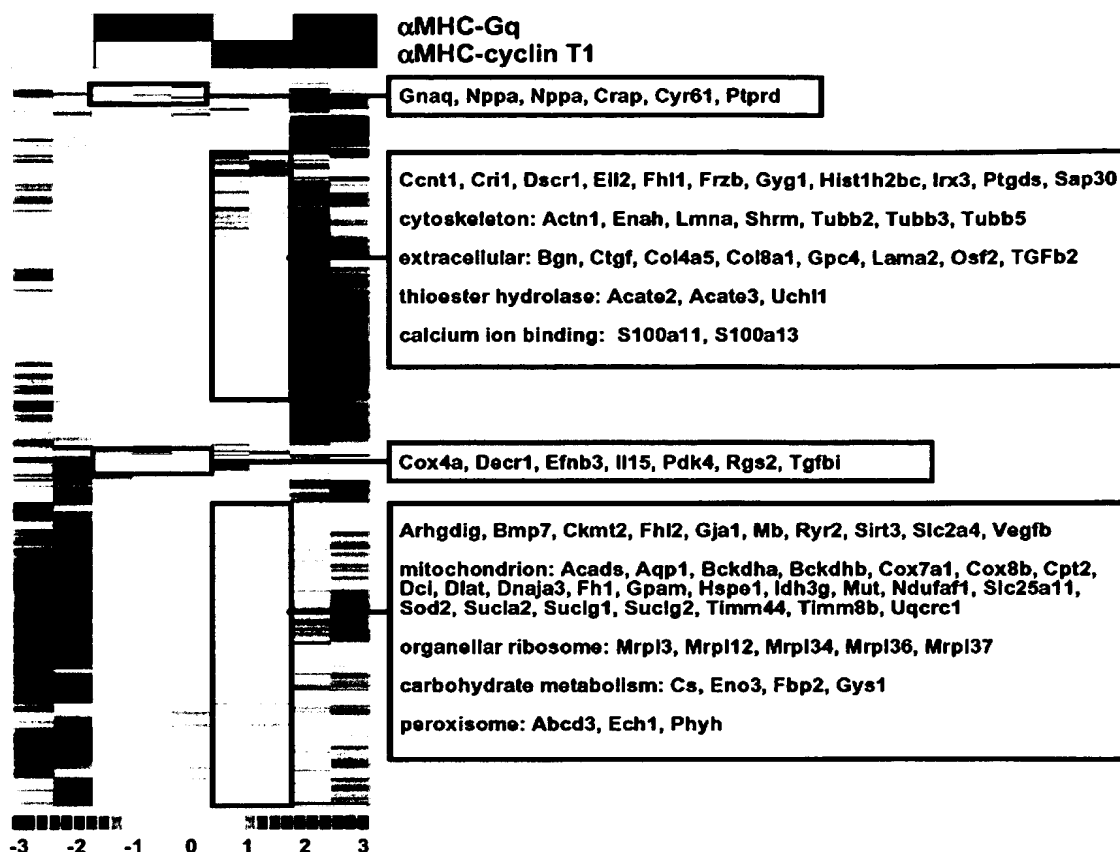
28S proteasome-associated pad1 homolog
5' nucleotidase, ecto
a disintegrin and metalloproteinase domain 9
actinin, alpha 1
acyl-Coenzyme A thioesterase 2, mitochondrial
acyl-Coenzyme A thioesterase 3, mitochondrial
aldolase dehydrogenase family 1, subfamily A1
annexin A1
annexin A2
aridine homolog 2 (Drosophila)
biglycan
calcium and integrin binding 1 (calmyrin)
cardiac morphogenesis
casein kinase 1, delta
CD24 antigen
CD43 antigen
CD81 antigen
chaperonin subunit 8 (theta)
chloride intracellular channel 4 (mitochondrial)
chondroitin sulfate proteoglycan 2
coagulation factor II (thrombin) receptor
connective tissue growth factor
CREB/EP300 inhibitory protein 1
cyclin-dependent kinase inhibitor 1A (P21)
cysteine rich intestinal protein
cysteine rich protein
cytokine receptor-like factor 1
cytotoxic T lymphocyte-associated protein 2 alpha
DEAD/H box polypeptide 60
deiodinase, iodothyronine, type II
diaphorase 1 (NADH)
dihydropyrimidinase-like 3
elastin
enabled homolog (Drosophila)
epidermal growth factor pathway substrate 15
epithelial membrane protein 1
fibulin 2
follistatin-like
four and a half LIM domains 1
glutamine synthetase
glutathione peroxidase 3
glycogenin 1
granulin
GrpE-like 1, mitochondrial
H3 histone, family 3B
heat shock 27 kD protein 2
heat shock 70 kDa protein 4
heparin-binding epidermal growth factor
histone H3
HIV-1 Rev binding protein
hypoxia inducible factor 1, alpha subunit
IL cytokine
inhibitor of DNA binding 2
insulin-like growth factor binding protein 7
insulin-like growth factor I receptor
integrin alpha 6 (fibronectin receptor alpha)
integrin beta 4 binding protein
integrin beta 5
integrin linked kinase
interferon-related developmental regulator 1
lamin A
low-density lipoprotein receptor-related protein 10
LPS-induced TN factor
lysyl oxidase

MAP kinase-interacting serine/threonine kinase 2
matrix gamma-carboxyglutamate (Gla) protein
measles
myosin, heavy polypeptide 7, cardiac muscle, beta
myotrophin
nestin
neurturin
Niemann Pick type C2
N51-associated protein 1-like
nuclear cap binding protein subunit 2, 20 kDa
nuclear factor I
nuclear protein 1
ornithine decarboxylase antizyme inhibitor
osteoblast specific factor 2 (fasciclin I-like)
paraoxonase 2
PDZ and LIM domain 3
phosphofructokinase, platelet
phospholipid transfer protein, beta
polymerase I
procollagen C-proteinase enhancer protein
procollagen, type I, alpha 2
procollagen, type IV, alpha 6
procollagen, type V, alpha 2
procollagen, type VII, alpha 1
programmed cell death 6 interacting protein
prolyl 4-hydroxylase, beta polypeptide
prostaglandin H2 (prostaglandin) synthase
protein phosphatase 1A, Mg dependent, alpha
protein tyrosine phosphatase, non-receptor type 21
quaking
ras homolog gene family, member J
RAS p21 protein activator 3
reelin
retinol binding protein 1, cellular
RNA binding motif protein 4
RNA polymerase I associated factor, 63 kD
S100 calcium binding protein A10 (calpactin)
S100 calcium binding protein A11 (calizzarin)
S100 calcium binding protein A13
S100 calcium binding protein A8 (calcytin)
secreted modular calcium binding protein 2
serpin, clade B, member 6
serpin, clade E, member 1
serpin, clade E, member 2
serpin, clade F, member 1
serine protease inhibitor 6
serine/threonine kinase 2
sialyltransferase 10
sialyltransferase polypeptide, 30 kD
Son of sevenless homolog 1, (Drosophila)
spermidine/putrescine N1-acetyl transferase
sphingosine phosphatase 1
talin
thrombospondin 1
tissue factor pathway inhibitor
tubby like protein 4
tubulin, alpha 1
tubulin, beta 2
ubiquitin 1
ubiquitin carboxyl-terminal esterase L5
ubiquitin carboxyl-terminal hydrolase L1
UDP-glucose dehydrogenase
uridine-cytidine kinase 2



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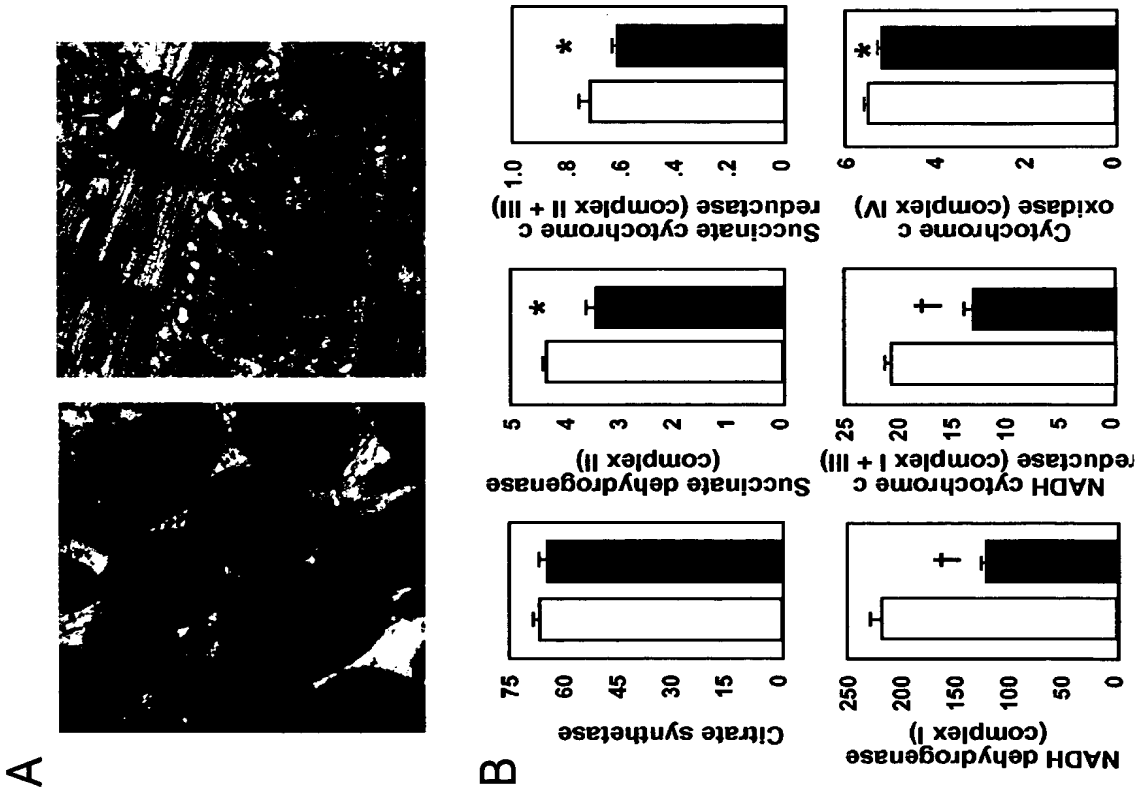
A



B

Genotype	Gq	cyclin T1
Common markers of cardiac hypertrophy		
ANP	34.78	0.29
BNP	3.57	1.43
αMHC	0.84	0.29
βMHC	3.32	1.15
skeletal α-actin	0.77	0.99
SERCA2	0.68	0.77
ryanodine receptor	0.96	0.77
phospholamban	1.13	0.77
connexin-43	2.68	1.29
Hsp70		
Cardiac-specific transcription factors		
Nkx2.5	0.98	0.84
GATA-4	1.06	0.76
MEF2C	1.02	0.82
Tbx5	0.89	0.98
SRF	1.09	1.03
Mitochondrial function		
PPARγ coactivator-1	0.83	0.39
nuclear receptor factor-1	1.21	0.77
nuclear receptor factor-2	1.12	0.77
transcription factor A, mitochondrial	0.96	0.77
PPARα	0.99	1.01
carnitine palmitoyltransferase 1	0.97	0.77
cytochrome C	0.86	0.77
cytochrome C oxidase Va (H)	1.03	0.77
cytochrome C oxidase VIa (H)	1.13	0.77
ATP synthase c	1.09	0.77
ATP synthase γ	0.82	0.77
adenosine nucleotide translocator-1	0.94	0.77
Sod2	0.78	0.39

FIG. 12



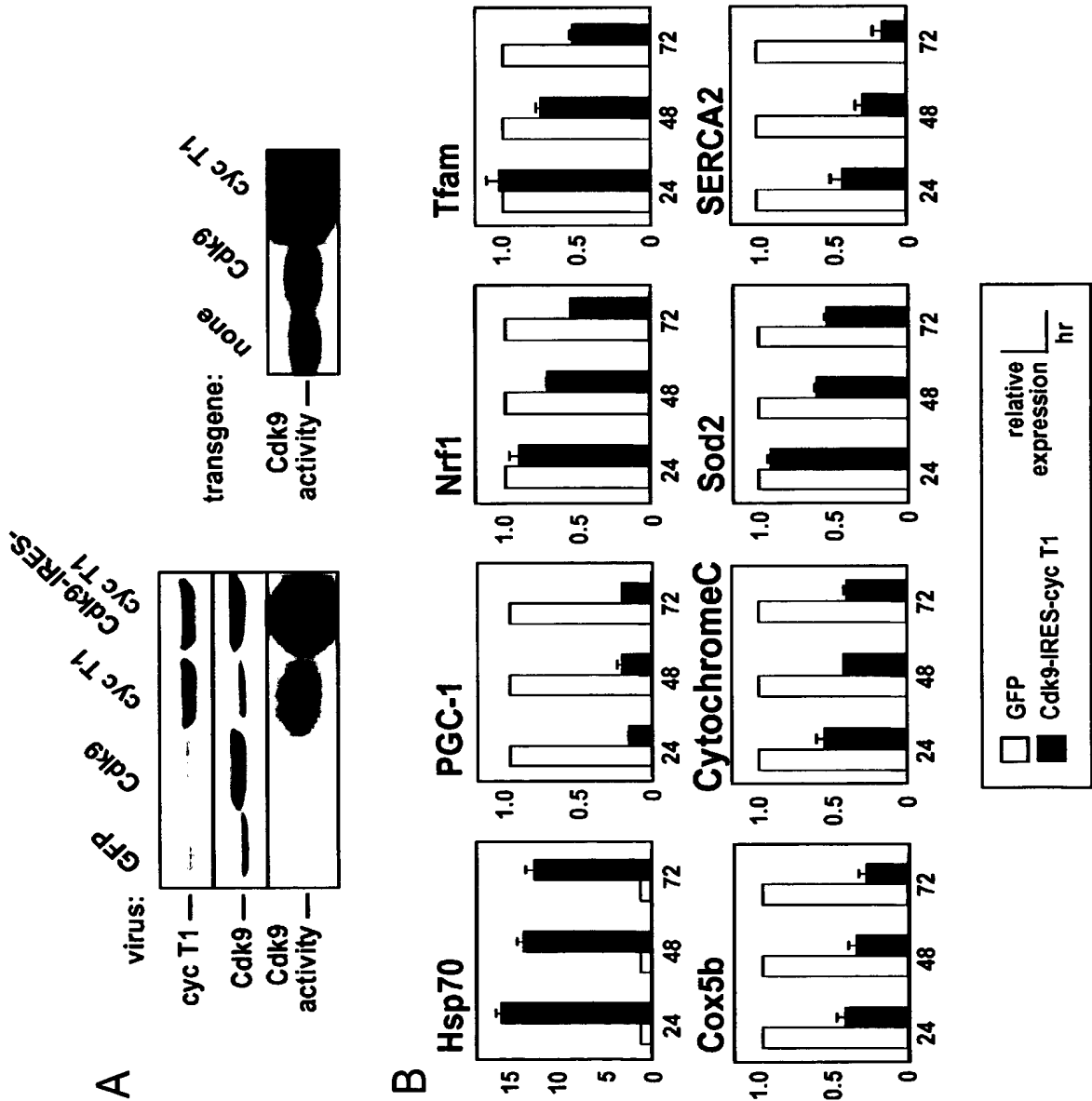
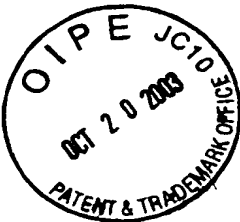


FIG. 14

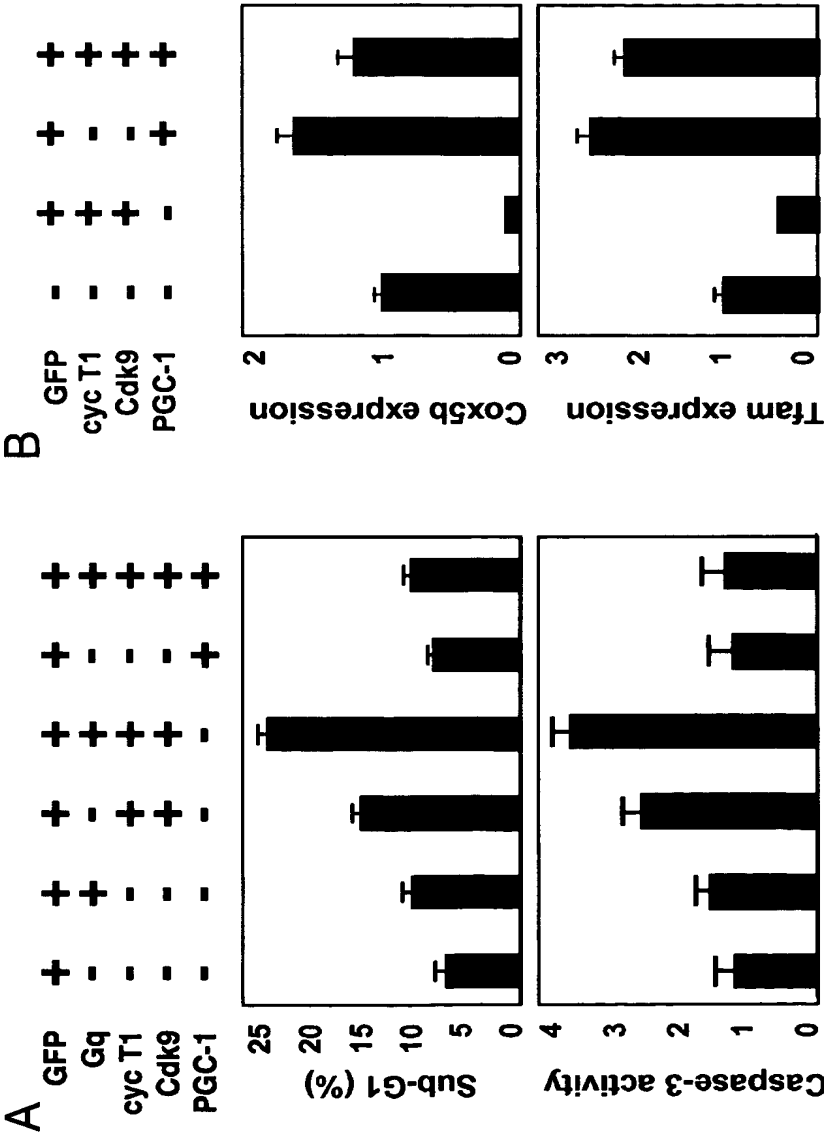
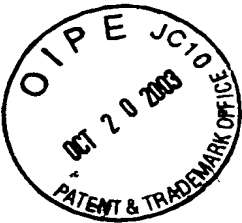


FIG. 15